

# इंटरनेट

# मानक

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Jawaharlal Nehru

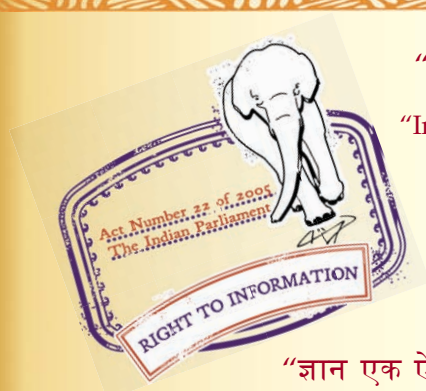
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IS 7249 (1993): Woodworking machines - Thickness planing machines with rotary cutterblock of one-side dressing - Nomenclature and acceptance conditions [PGD 3: Machine Tools]

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Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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भारतीय मानक

काष्ठ-कार्य मशीनें — एक तरफी ड्रेसिंग के घूर्मी काटन  
ब्लॉक वाली मोटाई प्लानिंग मशीनें — नामपद्धति  
और स्वीकार्य अवस्थाएँ  
( पहला पुनरीक्षण )

*Indian Standard*

WOODWORKING MACHINES — THICKNESS  
PLANING MACHINES WITH ROTARY CUTTERBLOCK  
OF ONE-SIDE DRESSING — NOMENCLATURE  
AND ACCEPTANCE CONDITIONS  
( *First Revision* )

UDC 674.056 : 621.912.252 : 620.1 ( 084.3 )

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**BUREAU OF INDIAN STANDARDS**  
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NEW DELHI 110002

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Price Group 3

## NATIONAL FOREWORD

This Indian Standard which is identical with ISO 7568 : 1986 'Woodworking machines — Thickness planing machines with rotary cutterblock of one-side dressing — Nomenclature and acceptance conditions' issued by the International Organization for Standardization ( ISO ), was adopted by the Bureau of Indian Standards on the recommendations of the Woodworking Machine Tools Sectional Committee ( PE 01 ) and approval of the Production Engineering Division Council.

This standard was first issued in 1974. Consequent upon the publication of ISO 7568 : 1986, this standard has been revised by adopting ISO 7568, to bring it in line with ISO standard. In this revision, clause references of ISO 230-1 : 1986 for method of tests has been incorporated which were not there earlier.

The text of the ISO standard will be approved as suitable for publication as Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Comma ( , ) has been used as a decimal marker in the International Standard while in Indian Standards, the current practice is to use point ( . ) as the decimal marker.
- b) Wherever the words 'International Standard' appear, referring to this standard, they should be read as 'Indian Standard'.

In this adopted standard, reference appears to ISO 230-1 : 1986. The Indian Standard IS 2063 : 1988 Acceptance code for machine tools — Geometrical accuracy of machines operating under no-load or finishing conditions ( *first revision* ) which is identical with ISO 230-1 : 1986 is to be substituted in its place.

The concerned technical committee has reviewed the provisions of ISO 7984 : 1987, referred in this adopted standard and has decided that it is accepted for use in conjunction with this standard.

## *Indian Standard*

# WOODWORKING MACHINES — THICKNESS PLANING MACHINES WITH ROTARY CUTTERBLOCK OF ONE-SIDE DRESSING — NOMENCLATURE AND ACCEPTANCE CONDITIONS ( *First Revision* )

### 1 Scope and field of application

This International Standard specifies the appropriate terminology for each part of the machine and, with reference to ISO 230/1, the geometrical tests for thickness planing machines with rotary cutterblock for one-side dressing; it also gives the corresponding permissible deviations which apply to machines of general purpose use and normal accuracy.

This International Standard deals only with the verification of accuracy of the machine. It does not apply to testing the running of the machine (vibrations, abnormal noises, stick-slip motion of the components, etc.), nor to its characteristics (speeds, feeds, etc.) which should generally be checked before testing accuracy.

This International Standard does not impose any practical test for thickness planing machines with rotary cutterblock for one-side dressing. Practical tests should be exceptions and have to be stated in a previous agreement between the manufacturer and the user.

This International Standard applies to those machines designated by the number 12.212 in ISO 7984.

### 2 References

ISO 230/1, *Acceptance code for machine tools — Part 1: Geometric accuracy of the machine operating under no load or finishing conditions.*

ISO 7984, *Woodworking machines — Technical classification of woodworking and auxiliary machines.*<sup>1)</sup>

### 3 Preliminary remarks

3.1 In this International Standard all dimensions and permissible deviations are expressed in millimetres.

3.2 To apply this International Standard, reference should be made to ISO 230/1, especially for installation of the machine before testing, the warming up of the cutterblock and other moving parts, and description of measuring methods. The measuring instruments shall not permit errors over 1/3 of the tolerances being checked.

3.3 The sequence in which the geometrical tests are given is related to the sub-assemblies of the machine and this in no way defines the practical order of testing. In order to make the mounting of instruments or gauging easier, tests may be applied in any order.

3.4 It is not always possible nor necessary to carry out all the tests given in this International Standard.

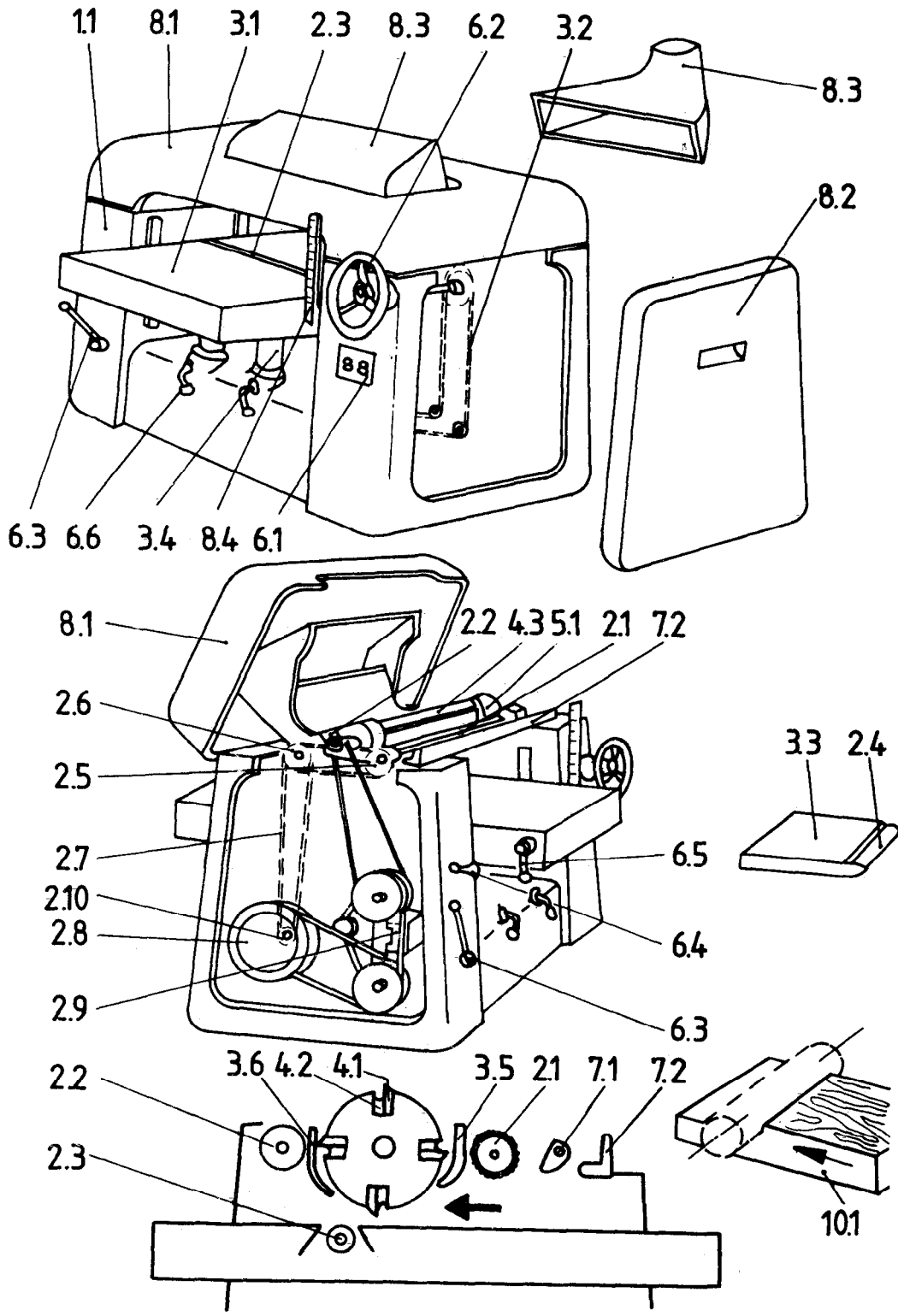
3.5 It is up to the user to choose, in agreement with the manufacturer, those tests relating to the properties which are of interest to him, but these tests shall be clearly stated when ordering a machine.

3.6 A movement is longitudinal when it takes place in the working direction of the piece.

3.7 When establishing the tolerance for a measuring range different from that given in this International Standard (see clause 2.311 in ISO 230/1), it should be taken into consideration that the minimum value of the tolerance is 0,01 mm.

1) At present at the stage of draft.

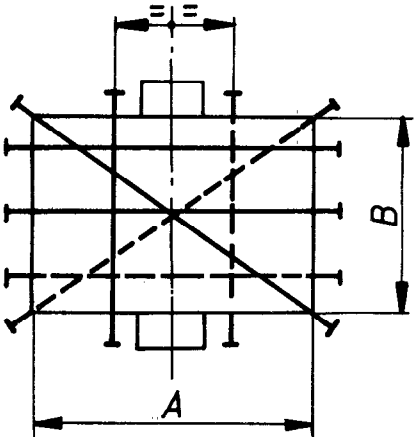
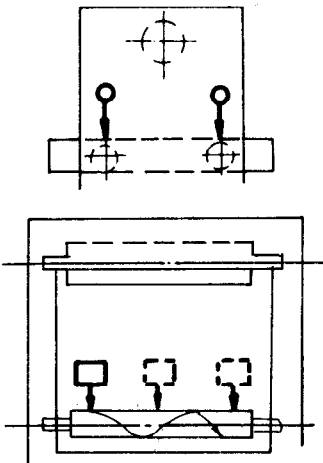
4 Nomenclature

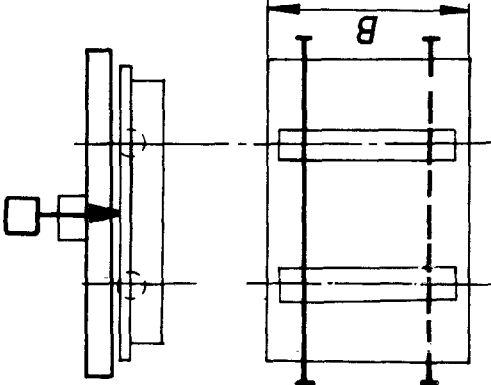
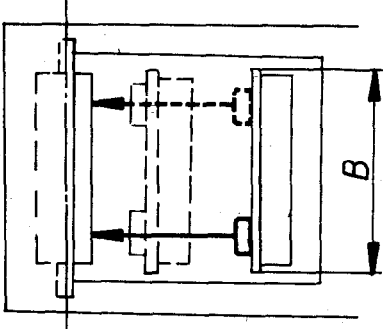


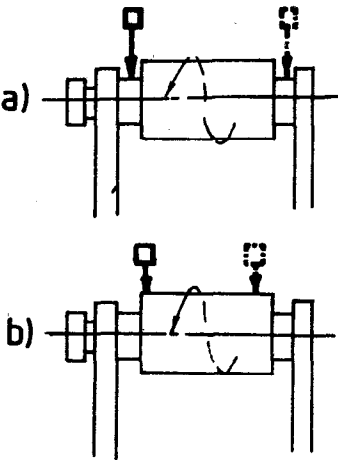
Reference	English
	Thickness planing machines with rotary cutterblock for one-side dressing
<b>1</b>	<b>Framework</b>
1.1	Main frame
<b>2</b>	<b>Feed of workpiece and/or tools</b>
2.1	Infeed feed roller
2.2	Outfeed feed roller
2.3	Table roller
2.4	Table extension roller
2.5	Infeed roller drive sprocket
2.6	Outfeed roller drive sprocket
2.7	Feed roller drive chain
2.8	Speed reduction gearbox
2.9	Variable speed gear
2.10	Tensioning idler sprocket
<b>3</b>	<b>Workpiece support clamp and guide</b>
3.1	Table
3.2	Chain transmission for table rise and fall movement
3.3	Table extension
3.4	Table elevating screw
3.5	Infeed pressure bar
3.6	Outfeed pressure bar
<b>4</b>	<b>Tool-holders and tools</b>
4.1	Blades
4.2	Cutterblock wedge
4.3	Cutterblock
<b>5</b>	<b>Workheads and tool drives</b>
5.1	Cutterblock bearing
<b>6</b>	<b>Controls</b>
6.1	Starting switch
6.2	Table vertical adjustment
6.3	Feed speed adjustment
6.4	Feed engagement lever
6.5	Table roller adjustment
6.6	Table vertical adjustment lock
<b>7</b>	<b>Safety devices</b>
7.1	Anti-kick-back fingers
7.2	Depth cut limiter
<b>8</b>	<b>Miscellaneous</b>
8.1	Hood
8.2	Access door to control gear
8.3	Dust extraction outlet
8.4	Scale for thicknessing
<b>9</b>	(clause free)
<b>10</b>	<b>Examples of work</b>
10.1	Thicknessing



## 5 Acceptance conditions and permissible deviations — Geometrical tests

No.	Diagram	Object	Permissible deviations	Measuring instruments	Observations and references in ISO 230/1 test code
G1		<p>Checking of flatness of the table:</p> <p>a) longitudinal straightness</p> <p>b) diagonal straightness</p> <p>c) transverse straightness</p>	<p>a) and b)</p> <p>0,20 for <math>A &lt; 1\ 000</math></p> <p>0,30 for <math>A &gt; 1\ 000</math></p> <p>c)</p> <p>0,10 for <math>B &lt; 400</math></p> <p>0,15 for <math>400 &lt; B &lt; 1\ 000</math></p> <p>0,20 for <math>B &gt; 1\ 000</math></p>	<p>Straightedge and feeler gauges</p>	<p>Clauses 5.212 and 5.322</p> <p>For checking c), measure in two places each about 50 mm on either side of the cutterblock.</p> <p>Flat to convex.</p>
G2		<p>Measuring of run-out of the table rollers</p>	<p>0,15</p>	<p>Dial gauge</p>	<p>Clause 5.612.2</p> <p>Checked at the ends and centre of each roller.</p>

No.	Diagram	Object	Permissible deviations	Measuring instruments	Observations and references in ISO 230/1 test code
G3		Checking of parallelism of the table rollers to the table	$0,10$ for $B < 400$ $0,15$ for $400 < B < 1\ 000$ $0,20$ for $B > 1\ 000$	Straight edge and dial gauge	Clause 5.412.4
G4		Checking of parallelism of the table to the cutterblock in the upper and lower positions	$0,10$ for $B < 400$ $0,15$ for $400 < B < 1\ 000$ $0,20$ for $B > 1\ 000$	Dial gauge	Clause 5.412.4

No.	Diagram	Object	Permissible deviations	Measuring instruments	Observations and references in ISO 230/1 test code
G5	 <p>a)</p> <p>b)</p>	Measuring of run-out of the cutterblock	0,03	Dial gauge	<p>Clause 5.612.2</p> <p>a) Where the blade setting device is carried from the block shoulders, check on the shoulders.</p> <p>b) Where the blade setting device is carried from the cutterblock, check on the block.</p>

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#### Amendments Issued Since Publication

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